QC

Memo

0.00

Quality Control

WORK ORDER NON-CONFORMANCE / UPDATE NCR: Yes / No QA Closed: Date: DISPOSITION AGAINST DEPARTMENT/PROCESS Work Order: Skid-tube Water Jet Engineering Crosstube Rework Part No. Machining Small Fab Prod. Eng. Coor. Quality Scrap Other Thermoforming Finishing Rec/Store/Packaging Use-as-is Work Order Update Composite Supplier Large Fab NCR No. Description of work order update Initial Action Sign & Root Qty or Non-conformance Chief Eng Description Date Verification QC Inspector Date Step Cause Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Pressure/Forced Bending Bend Grain Ovalized BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Broken/Damaged Inspection Incomplete Weld Part Incorrect Cracks Part Lost/Missing Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Wrong Power Loss/Surge Other **Cut Too Short** Misread Inspection Strip in Tube **Drill Holes** Offset Ripples in Bend

Out of Calibration

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 95380 Page 2 January-09-13 11:55:37 AM Accept Item ID: D3021-041 *N900040100* Setup Start **Revision ID:** Item Name: Tube Assembly Start Oty: 1.00 1/14/13 **Start Date: Cust Item ID:** Req'd Qty: 1.00 Required Date: 1/25/13 **Customer:** Reference: Run Process Plan: _____ Date: ____ Tooling: Approvals: Date: Stop QC: ____ Date: ____ SPC (Y/N): Date: Reject Sequence ID/ Operation Tool ID Tool # Plan Accept Reject Insp. Set Up/ Qty Work Center ID **Description** Code **Qty** Number Stamp **Run Hours** DAS 120 QC5- Inspect part completeness to step on W/O 0.00 09 *120* 0.00 Memo Quality Control 130 Grey Sandtex(Ref: 4,3-5,6) per (0.00 1 & BL 13-3-4 *130* Powdercoat 0.00 START TIME: **Powder Coating** FINISH TIME: A QC3- Inspect Part Finish 140 0.00 QC 0.00 Memo

Quality Control

DQA: Date: **WORK ORDER NON-CONFORMANCE / UPDATE** NCR: Yes / No QA Closed: Date: AGAINST DEPARTMENT/PROCESS DISPOSITION Work Order: Skid-tube Crosstube Water Jet Engineering Rework Machining Small Fab Prod. Eng. Coor. Quality Scrap Part No. Thermoforming Finishing Rec/Store/Packaging Other Use-as-is NCR No. Work Order Update Large Fab Composite Supplier Description of work order update Action Sign & Initial Root Chief Eng Date Verification QC Inspector or Non-conformance Description Date Step Qty Cause Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY**

Landing Gear General								
	Bending	Bend		Grain		Ovalized	Pres	ssure/Forced
	Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Under tolerance	Tem	perature/Cure
	Cracks	Broken/Damaged		Inspection Incomplete		Part Incorrect	Wel	d
	Crushed/Crimped.	Burrs		Instructions Incomplete/Unclear	L	Part Lost/Missing	Wro	ong Stock Pulled
	Cuffs	Contamination		Maintenance		Part Moved		
	Heat Treat	Countersink		Mislabeled		Positioned Wrong	_	
	Inspection Strip in Tube	Cut Too Short		Misread		Power Loss/Surge	Oth	er
	Ripples in Bend	Drill Holes	L	Offset				
	Torque Waves in Extrusion	Drawing		Out of Calibration				
	Turning Sequence	rning Sequence Finish		Out of Sequence				
	Wave/Twist in Tube	Folio		Outside Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 95380 Page 3 January-09-13 11:55:37 AM Item ID: D3021-041 Accept Setup Start *N900040100* **Revision ID:** Item Name: Tube Assembly Start Date: 1/14/13 Start Qty: 1.00 **Cust Item ID:** Required Date: 1/25/13 **Reg'd Oty:** 1.00 **Customer:** Reference: Run **Tooling:** Process Plan: Date: Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Reject Accept Insp. Work Center ID Description Otv Oty Number Stamp Code **Run Hours** Identify as per dwg & Stock Location: b A150 0.00 *150* Packaging 0.00 Memo Packaging 160 QC21- Final Inspection - Work Order Release 0.00

0.00

Memo

160

Quality Control

QC

NB035

											DQA:	Date:					
NCR: Y	⁄es	/ No				WORK ORDER NON-O	CO	NFORI	MANCE / UP	DATE							
						¥					QA Closed:	Date:					
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS									
Part No						Rework Scrap Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other				
Root					Descri	ption of work order update	I	nitial	Ac	tion	Sign &						
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector				
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved																	
	FAULT CATEGORY																
Landir	ng G	iear				General	General					F	-				
Bending Centre Not Concentric to O/S					o/s	Bend BOM/Route Broken/Damaged		Grain Hardwa	ire ion Incomplete	-	Ovalized Over/Under Part Incorre	Pressure/Forced Temperature/Cure Weld					

Inspection Incomplete

Maintenance

Out of Calibration Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Instructions Incomplete/Unclear

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Wrong Stock Pulled

Other

Broken/Damaged

Contamination

Countersink

Cut Too Short Drill Holes

Drawing

Finish Folio

Burrs

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 1

Work Order ID:

95380

Parent Item:

D3021-041

Parent Item Name:

Tube Assembly

Start Date: 1/14/13

Required Date: 1/25/13

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP 01.10.23 New Issue DD VERF:JLM

e SM

IPP REV:B 12.06.26 DWG PB2

Component Item ID/ Item Name	Replacement Ítem ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3017-11		Manufactured	No			100	Each	56.0000	2	2			
M4130NT0.750W.049 4130 RD Tube .750 x.049	w	Purchased	No	Location WA002	37	Loc Qty 56 56		27.5218	2.0833	2.19294 67	74 /3 - 3 -		2.22
				Location MAT033 1233		Loc Oty 27.5217893 27.5217893		oc Code					

												DQA:	Da	ite:			
NCR:	Yes	/ No				WORK ORDER NON-C	100	VFOR	MANCE / UP	DATE							
												(A Closed:	Da	ite:			
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS									
WOIK OIG	٠					Rework	1	Skid-tube Crosstube					Water Jet		Engineering		
Part 1	No.					Scrap	1		Machining	Small Fab	\dashv	Proc	d. Eng. Coor.	\vdash	Quality		
	•					Use-as-is	1	i	noforming	Finishing	1		e/Packaging	-	Other		
NCR I	No.					Work Order Update	1		Large Fab	Composite	7	Suppli					
			,														
Root		Descri				ption of work order update	l l	Initial		Action		Sign &					
Cause		Date	Step	Qty	(or Non-conformance	Ch	Chief Eng Description				Date	Verification	n	QC Inspector		
Doc/Data	Ш																
Equip/Tooling	Ш	4															
Operator	Ш								,								
Material	Щ																
Setup	Ш		1														
Other	Ш																
Process	Ш						İ						=				
Supplier	Ш		l														
Training	Ш																
Unapproved					<u> </u>		<u> </u>										
						F.	AUL	T CATE	GORY								
Landi	ng C	iear				General	_	,		_	_			_	1		
Bending						Bend	Grain				_	Ovalized			Pressure/Forced		
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardware				Over/Under	tolerance		Temperature/Cure		
	Cracks					Broken/Damaged		Inspection Incomplete			P	Part Incorrect			Weld		
	Crushed/Crimped.					Burrs		Instructions Incomplete/Unclear				Part Lost/Mi	ssing		Wrong Stock Pulled		
		Cuffs				Contamination		Mainte	enance		P	Part Moved					
		Heat Trea	t			Countersink		Mislabe	eled	P	Positioned Wrong						

Misread

Out of Calibration

Out of Sequence

Outside Dirnensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



